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INFORMATION REPORT

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COUNTRY USSR(Ukrainian SSR)

DATE DISTR. 13 February 1952

SUBJECT KhEMZ Electric Motor Plant at Kharkov

NO. OF PAGES 2

PLACE 25X1A

NO. OF ENCLS. 8
LISTED BELOW

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SUPPLEMENT TO
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25X1X

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1. The KhEMZ Electric Motor Plant was on the southeastern outskirts of Kharkov (50°00' N/36°15' E), Ukrainian S.S.R., about 1 km southeast of the Seryi Motor Factory for travelling machines. The KhEMZ plant, covering 1,000 x 800 meters, had received first industrial drawings and was in full operation in September 1949, with only one motor left in the southwestern part of the plant. No preparations for enlarging the plant were observed. The machinery of the plant is 30 percent American, 30 percent Soviet, and 20 percent German. The plant had its own source of power and a railroad spur.

2. The plant, which employed about 12,000, had the following weekly output: 5 motors, 3.50 meters high; 20 rotors, 60 cm high, 1.50 meters long; 300 rotors, 40 cm high; 2 or 3 submarine switch boxes, 120 x 60 x 170 cm; insulators or transformers; electric irons, hot plates, and cooling plates. ** Copper plates, brass bars, iron plates, were supplied to the plant, but all other materials were produced there.

25X1X3.

the plant comprised two main sections, the electric motor plant to the west and the turbine and generator plant to the east. Only persons with special identity cards were allowed to enter both sections, which were separated by guards. Some of the new buildings in both sections were not completely furnished. ** The plant produced electric rotors, turbines of various sizes, including ship turbines.

25X1X4.

Grates had been replaced, and some new buildings had been constructed by August 1949. The plant's boiler house had four boilers, one with travelling grates. The foundry of the turbine plant started operation in 1949. It had two cupola furnaces, one electric steel furnace, two electric melting furnaces for precious metals, and one tipping bogie. In this foundry three laminated wheels with a diameter of 3 meters were cast each month for ship turbines. The foundry of the electric motor plant had three cupola furnaces and an annealing department with annealing furnaces. Before the construction of the

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Date 01/08/78 By: 02-9

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foundry in the turbine plant, all work required by that section was done here. 25X7X for the plant was supplied via an underground cable from the town.

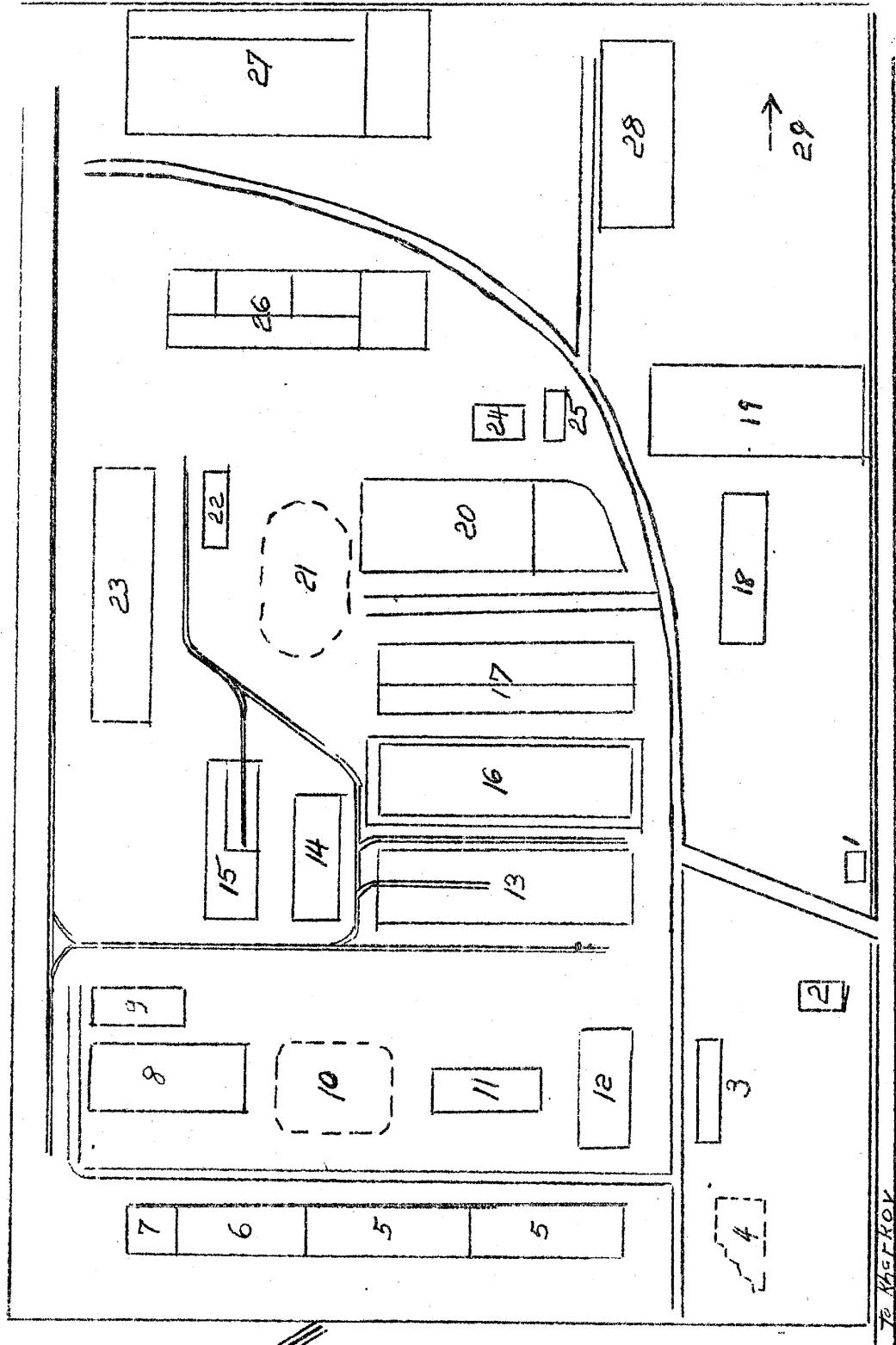
5. [REDACTED] 1,500 electric motors of various sizes and three ship turbines were produced each month. [REDACTED] the plant had 14,000 Soviet civilians and 1,000 PW's working in three shifts.

25X1A * [REDACTED] Comment. See Annex 1 for the first PW's sketch of the plant's layout. Annex 2 contains his sketch of a cross section of workshop 1; Annexes 3 and 4, ground plans of two stories of workshop 1; and Annex 5, a ground floor plan of workshop 2.

25X1A ** [REDACTED] Comment. For the first PW's sketch of various pieces produced by the plant, 25X6 Annex 6.

*** [REDACTED] Comment. For the second PW's sketch locating the plant see Annex 7. His layout sketch of the plant is in Annex 8.

8 Annexes: [REDACTED] sketches or ditto.

KhEMZ Electric Motor Plant at Kharkov: Layout Sketch

25X6

1
CENTRAL INTELLIGENCE AGENCYLegend.

1. Entrance and guard house.
2. Bathing installation, 30 x 15 meters.
3. Pharmacy, 40 x 15 meters.
4. Ruins.
5. Storage sheds for raw materials and paper.
6. Pattern shop.
7. Motor vehicle repair shop.
8. Main administrative offices and technical drafting offices, a multi-story brick building, 200 x 40 meters.
9. Electrical shop, brick building with two or three stories, 80 x 30 meters. This shop did repair and maintenance work on electric cars.
10. Iron dump.
11. Storage shed, brick building, 50 x 20 meters, for sheet-metal and bars.
12. Party of ice, multi-story brick building, 60 x 20 meters.
13. Workshop No 1, four-story brick building with arched roof, 300 x 90 x 40 meters. A large courtyard went through the length of the building. For cross section of this shop see Annex 2. This shop produced component parts for electric motors and did assembly work and loading of electric motors.

Ground floor: See Annex 3.
 Second floor: Offices and drafting rooms.
 Third floor: See Annex 4.
 Fourth floor: Heavy rails for two 50-ton travelling cranes, according to PW engineer.

14. Sawmill, 60 x 20 meters, producing planks, beams, and boxes for shipping.
15. Forge, brick building, 100 x 30 meters, with three pneumatic hammers, doing repair for plant requirements. The southeastern section, which had a railroad spur, repaired locomotives.
16. Four-story brick building, 300 x 90 meters. On the ground floor were generators which were constantly in operation and which supplied power to the plant, 25X1X
25X1X. The other stories of this building housed PW camp No 7119/1.
17. Workshop No 2, four-story brick building, 300 x 60 meters. For ground floor plan, see Annex 5. The service department in this building was strictly guarded.
18. Canteen and school, multi-story brick building, 50 x 20 meters.
19. Zante Khatrov workshop, multi-story brick building where radiators were manufactured and repaired.
20. Aldo workshop, six-story brick building, 300 x 80 meters. All rooms on the south side were offices, while all others housed workshops and machine shops for the production of large electric motors. The second floor had a shop producing electric irons, hot plates and cooking plates. The ground floor had many large lathes.
21. Iron dump.

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25X1A

22. Saw frame, 30 x 15 meters (sic).

23. Storage shed, long two-story building, storing sheet-metal and metal plates.

24. Concrete mixing shop, wooden structure, 30 x 15 meters, used for minor construction work.

25. Pattern shop, 20 x 8 meters.

26. Multi-story brick building with Kessarols quarries in its southern section, a large forge in the western and technical offices and store-rooms in the eastern section.

27. Electric drilling department, a brick building with offices in the southern part, a pattern shop in the eastern part, and plating and drilling shops in the rest of the building. Motor parts were processed there.

28. Foundry and forge, brick building, 100 x 40 meters, called "LC", and manufacturing casings.

29. To radio tower, approximately 200 meters.

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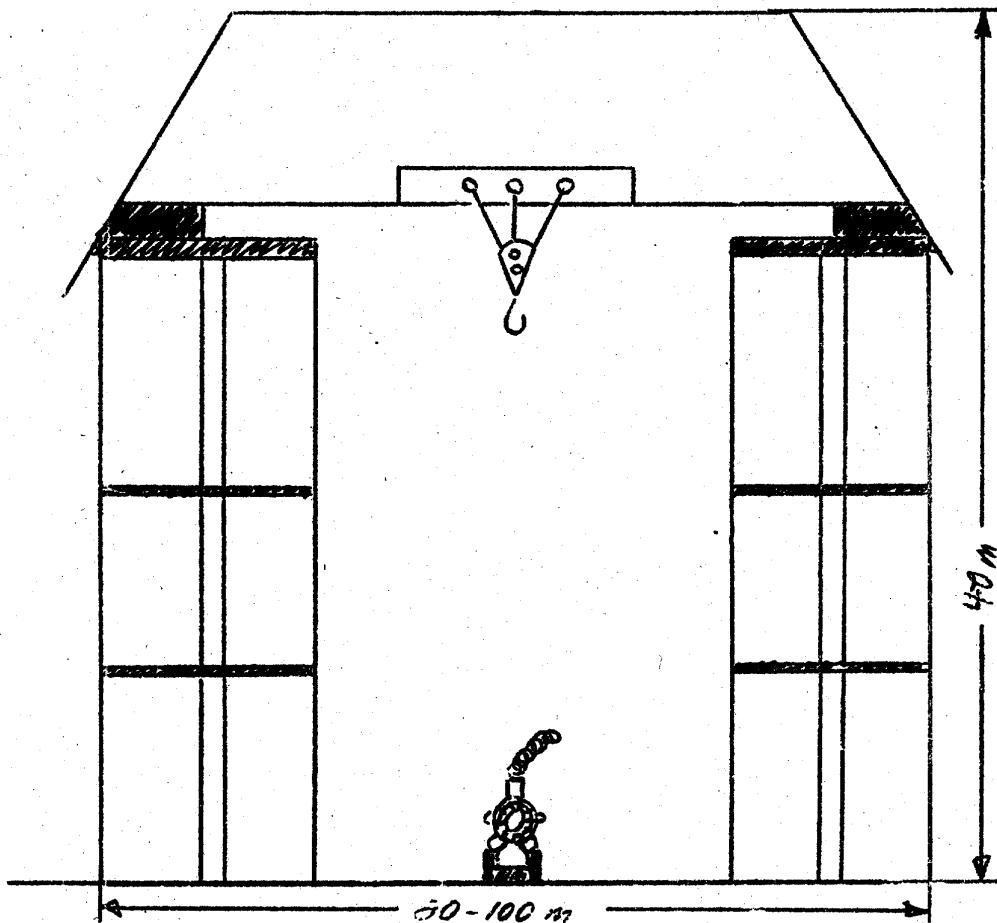
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Cross Section of workshop



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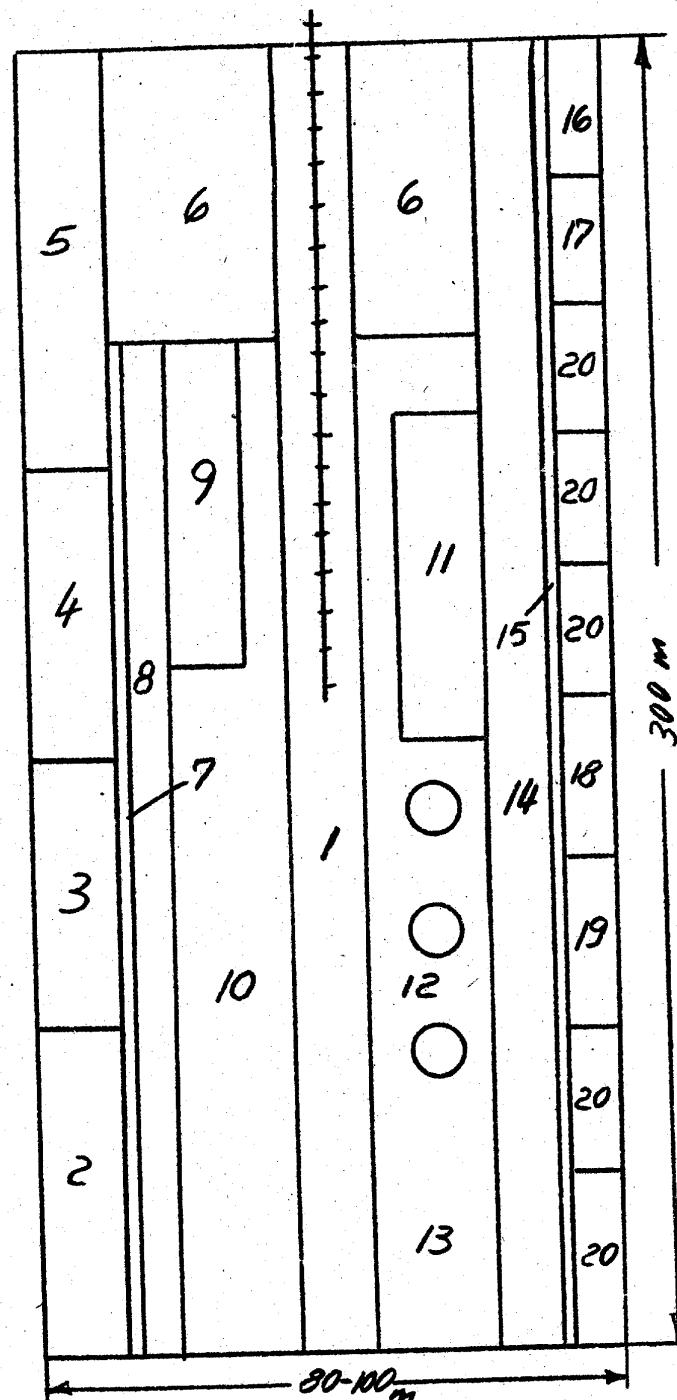
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nd Floor of workshop.

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not to scale

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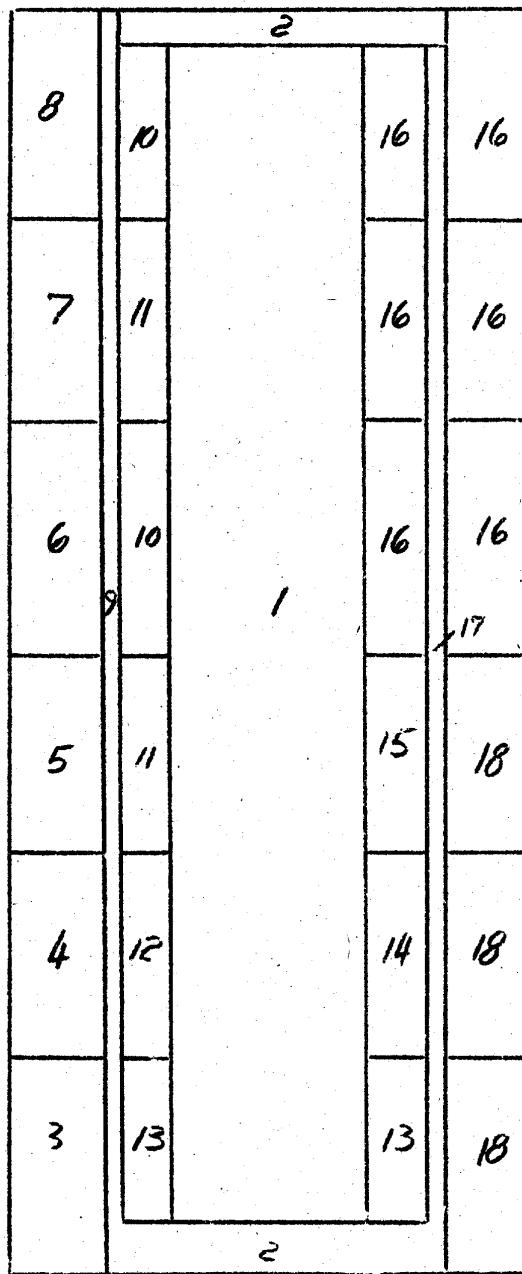
Legend.

1. Inner court with spur track as far as the center of the building and a parking area.
2. Press cutting shop, manufacture of casing (Außenschalen) and base for electric motors.
3. Press cutting shop, like No 2 but with lacquer shop. Sheets of metal were lacquered and sent on a conveyor belt through a furnace for firing (Brennen).
4. Foundry with four casting furnaces, 150 cm in diameter casting component parts for electric motors.
5. Painting shop.
6. Loading department.
7. Corridor, three to four meters wide.
8. Lathe shop with 20 lathes, 4 meters long and 1.50 meters wide, processing axles and casing parts.
9. Six test stands.
10. Shop assembling motors and manufacturing component parts.
11. Lathe shop with five American lathes, 4 x 1.5 meters, processing large parts of motors.
12. Three drilling-and -turning mills, 1.50 meters in diameter.
13. 8 to 10 milling machines.
14. 40 to 60 American lathes, 2 to 2.5 x 1 to 1.5 meters.
15. Corridor, about 3 to 4 meters wide.
16. Paper storeroom.
17. Printing shop.
18. Screw storeroom.
19. Office.
20. Unidentified subsidiary rooms.

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Third Floor of Workshop 1.

8	10	16	16	
7	11	16	16	
6	10	16	16	
5	11	15	18	
4	12	14	18	
3	13	13	18	
2				
2				

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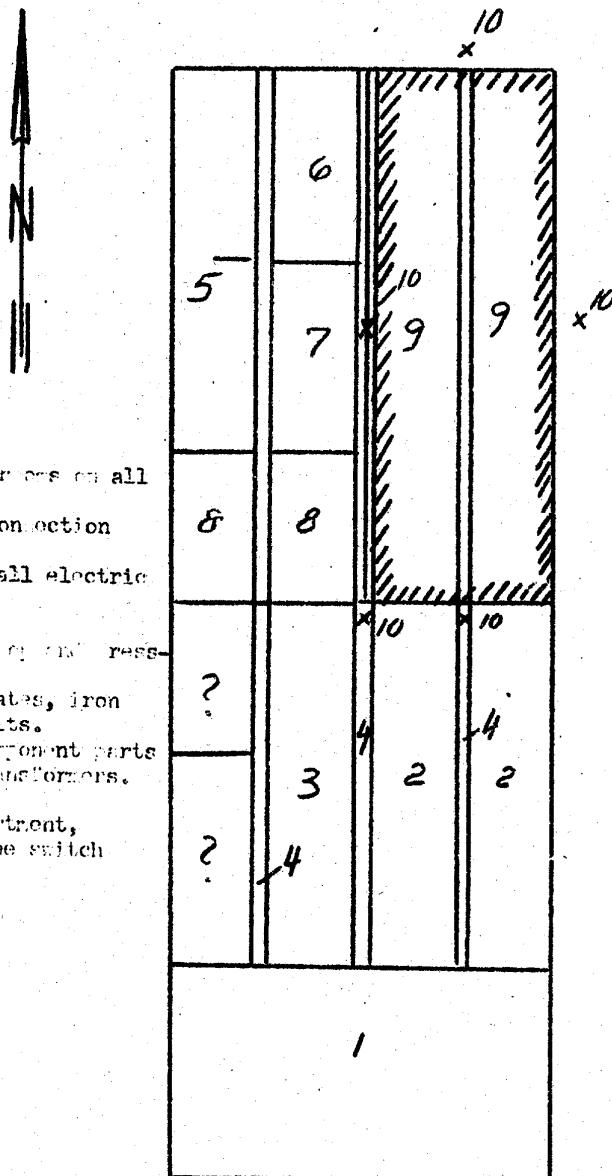
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Legend.

1. Inner court.
2. Two passageways.
3. Drilling shop with 8 to 1" drilling machines, processing motor casings.
4. Shop for the fitting of rotors and casing parts. This shop had several gas and electric welding apparatuses.
5. Office.
6. Drafting office.
7. Drying chamber with one drying furnace for lacquer metal sheets.
8. Assembly shop for small electric rotors.
9. Corridor.
10. Final assembly shop for small electric rotors, 50 to 100 cm high.
11. Storerooms for component parts.
12. Lathe shop.
13. Unidentified rooms.
14. Two mounting apparatuses.
15. Shop bending and straightening wire for electric motor rotors.
16. Armature winding shop.
17. Corridor.
18. Office and storerooms.

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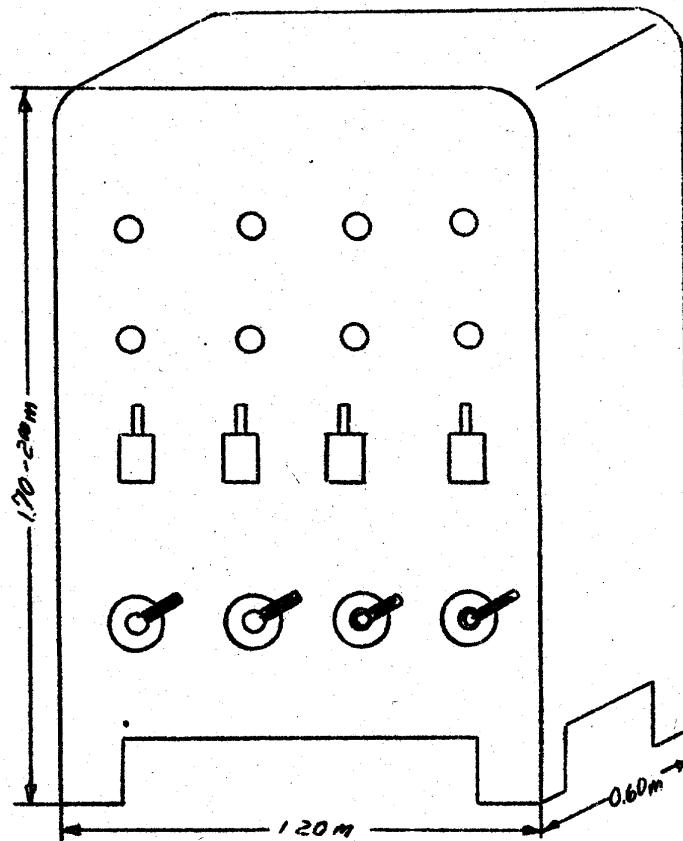
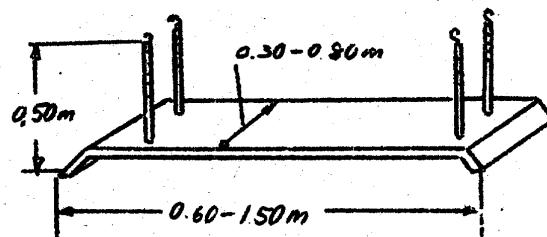
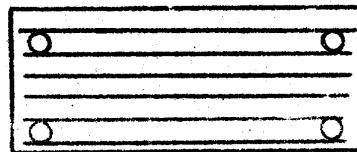
Ground Floor of Workshop 2.

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Pieces produced by the Plant

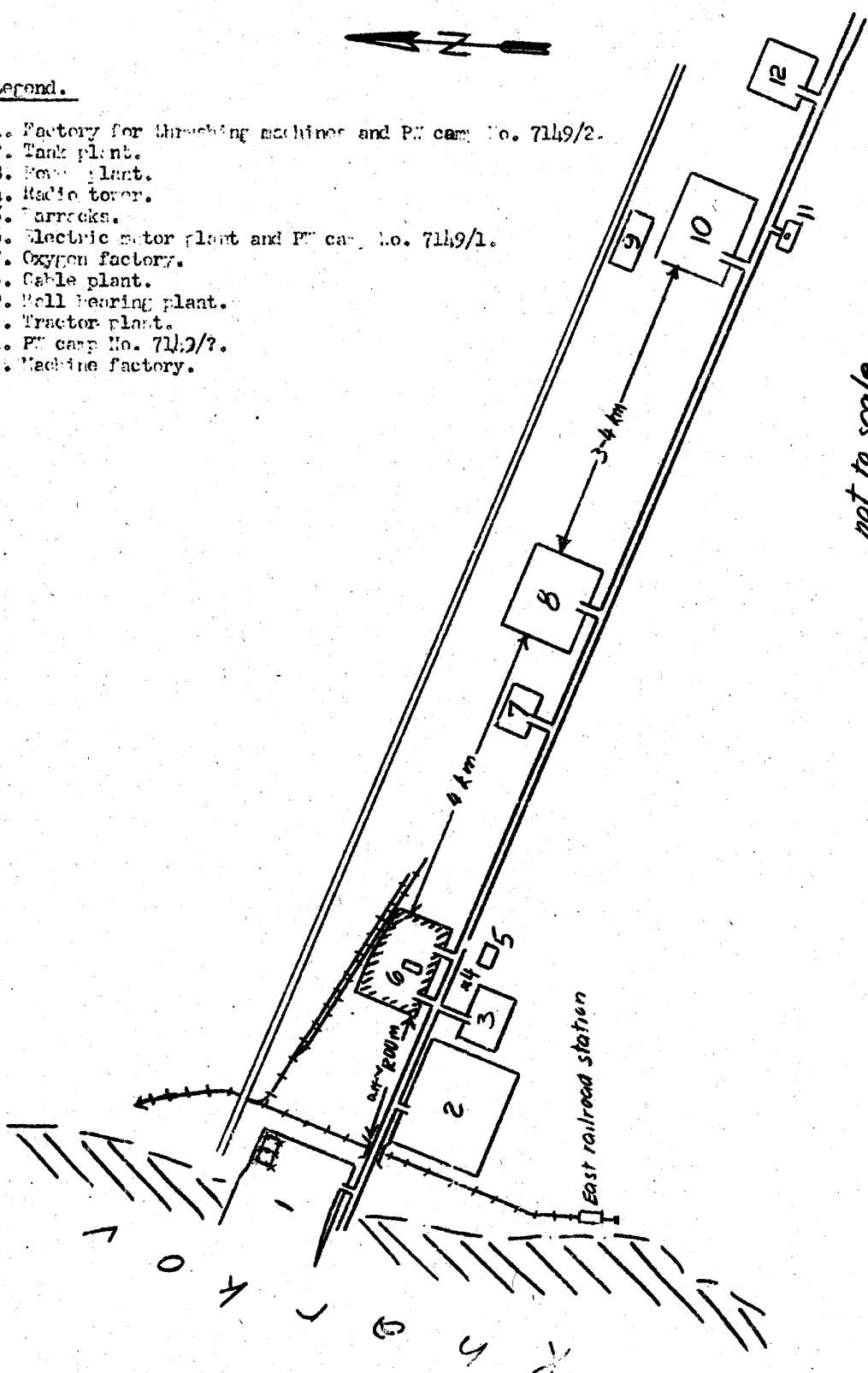
Submarine Switch Box

Transformer
or
Insula or.Cove fitted on the
Transformer or
Insula or.

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Kharkov Electric Motor Plant in Kharkov.Legend.

1. Factory for threshing machines and PW camp No. 7149/2.
2. Tank plant.
3. Power plant.
4. Radio tower.
5. Tramroads.
6. Electric motor plant and PW camp No. 7149/1.
7. Oxygen factory.
8. Cable plant.
9. Ball bearing plant.
10. Tractor plant.
11. PW camp No. 7149/2.
12. Machine factory.



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Layout of Khemz Electric Motor Plant in Kharkov.

not to scale

800-1000m

"009-055"

25X6

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Legend.

1. Guards.
2. Bathing installation.
3. Dispensary.
4. The storage sheds.
5. Forge and annealing shop.
6. Storeroom and office.
7. Building being reconstructed.
8. Garage.
9. Storeroom for finished products.
10. Locomotive re-air shop.
11. Carpenter shop.
12. Administration.
13. Lumber yard.
14. Electric motor plant's main building exactly 250 x 15 meters, and four stories high. Many American and German lathe were installed in 1949. The armature winding shop was on the third floor. Lathe shops and final assembly shops were on the second floor and ground floor.
15. Fuel station.
16. Storeroom and office.
17. Boiler house.
18. PW camp No. 71b9/1.
 - a. Guard.
19. Shop, 150 x 60 meters, constructing apparatus.
20. Boiler house with three high pressure boilers.
21. Coal dump.
22. Work shop.
 - a. Dressing shop.
 - b. Forge.
 - c. Galvanizing shop.
23. Garage.
24. So-called lacquer shop, which was strictly guarded.
25. Subsidiary installations of unknown purpose called black-out installation by the Soviets.
26. Turbine and generator plant's main workshop, 300 x 100 meters, a four-story steel and concrete structure. A large American drilling-and-turning mill was said by the Soviets to be the largest of its kind in Europe.

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This shop, which also had many metal working machines of American and German origin, produced component parts, assembled turbines, and fitted casings.

27. Waste material dump.
28. Lumber yard.
29. Building, 70 x 30 meters, under construction since before the war but still without a roof.
30. Building, 30 x 40 meters, under construction but with its skeleton and roof completed.
31. Electric welding shop, newly completed. Its equipment is unknown.
32. Electric drilling shop, 125 x 40 meters, completed in early 1949. Five foundations 4 x 6 meters and 3.5 meters deep were constructed along the eastern wall of the building for a new type of lathe. Machinery, which was not [REDACTED] was 25X1X installed by May 1949 when operation started.
33. Building under construction, vaguely estimated at 60 x 60 meters. Its walls and roof had been completed.
34. Construction office.
35. Foundry, 100 x 60 meters, constructed after the war. It had two casting furnaces in operation and one furnace under construction.
36. Wooden one-story building, serving as quarters.
37. Fire department.
38. New foundry, 100 x 30 meters, under construction, with only the outer walls completed. According to a Soviet construction chief, this shop was later to be connected with the old foundry in operation.
39. Tailor shop.
40. Garage.
41. Entrance and guard.
42. Main administration.
43. Plant kitchen.
44. Park with monument.